

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. (currently amended): A photoelectric conversion element, comprising:  
An an electrode substrate, comprising which includes:  
a base material;  
a metal circuit layer ~~that~~ which is provided on the base material; and  
a transparent conductive layer ~~that~~ which is electrically connected to the metal circuit layer,  
wherein the metal circuit layer is covered by an insulating layer;  
an oxide semiconductor porous film provided on a side of the electrode substrate  
where the transparent conductive layer is provided;  
a sensitizing dye provided in the oxide semiconductor porous film;  
a counter electrode, which has a different constitution from the electrode substrate  
and which is formed of a film made of a conductive material formed on a substrate, and  
which is placed facing the oxide semiconductor porous film; and  
an electrolyte layer or charge transfer layer, which is adjacent to the oxide semiconductor porous film, and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed.

2. (currently amended): ~~The electrode substrate~~ photoelectric conversion element according to claim 1, wherein the insulating layer comprises a material that includes a glass component.

3. (currently amended): ~~The electrode substrate~~ A production method of the photoelectric conversion element according to claim 2, wherein the insulating layer is formed by printing a paste that contains glass frit.

4. (currently amended): ~~The electrode substrate~~ A production method of the photoelectric conversion element according to claim 1, wherein the metal circuit layer is formed by using a printing method.

5. (canceled).

6. (currently amended): A dye-sensitized solar cell comprising:  
an electrode substrate, which includes:  
a base material;  
a metal circuit layer which is provided on the base material; and  
a transparent conductive layer which is electrically connected to the metal circuit  
layer,  
~~the electrode substrate according to claim 1;~~  
wherein the metal circuit layer is  
covered by an insulating layer.

~~a~~an oxide semiconductor porous film that is provided on a side of the electrode substrate ~~above which where~~ the transparent conductive layer side is provided;

a sensitizing dye ~~that is provided on a surface of~~ in the oxide semiconductor porous film;

a counter electrode, ~~that is~~ which has a different constitution from the electrode substrate and which is formed of a film made of a conductive material formed on a substrate, and which is placed facing the oxide semiconductor porous film; and

an electrolyte layer or charge transfer layer, ~~that is~~ which is adjacent to the oxide semiconductor porous film, and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed.

7. (canceled).

27. (currently amended): A photoelectric conversion element, comprising:

~~An~~an electrode substrate, ~~comprising~~ which includes:

a base material;

a metal circuit layer ~~that~~ which is provided on the base material; and

a transparent conductive layer ~~that~~ which is electrically connected to the metal circuit layer,

wherein the metal circuit layer is covered and insulated by an insulating layer ~~that~~ which includes a heat-resistant ceramic as a main component,

an oxide semiconductor porous film provided on a side of the electrode substrate where the transparent conductive layer is provided;

a sensitizing dye provided in the oxide semiconductor porous film;  
a counter electrode, which has a different constitution from the electrode substrate  
and which is formed of a film made of a conductive material formed on a substrate, and  
which is placed facing the oxide semiconductor porous film; and  
an electrolyte layer or charge transfer layer, which is adjacent to the oxide  
semiconductor porous film, and which is provided between the counter electrode and the  
electrode substrate above which the oxide semiconductor porous film is formed.

28. (currently amended): ~~The electrode substrate~~ photoelectric conversion element according to claim 27, wherein the heat-resistant ceramic contains at least one of alumina, zirconia, and silica.

29. (currently amended): ~~The electrode substrate~~ photoelectric conversion element according to claim 27, wherein the insulating layer contains at least one of silicate, phosphate, colloidal silica, alkyl silicate, and metal alkoxide.

30. (currently amended): ~~The electrode substrate~~ A production method of the photoelectric conversion element according to claim 27, wherein the insulating layer is formed using a printing method.

31. (currently amended): ~~The electrode substrate~~ A production method of the photoelectric conversion element according to claim 27, wherein the metal circuit layer is formed using a printing method.

32. (canceled).

33. (canceled).

34. (currently amended): A dye-sensitized solar cell comprising:

an electrode substrate, which includes:

a base material;

a metal circuit layer which is provided on the base material; and

a transparent conductive layer which is electrically connected to the metal circuit layer,

the electrode substrate according to claim 27; wherein the metal circuit layer is covered and insulated by an insulating layer which includes a heat-resistant ceramic as a main component,

a an oxide semiconductor porous film that is provided on a side of the electrode substrate above which where the transparent conductive layer side is provided;

a sensitizing dye that is provided on a surface of in the oxide semiconductor porous film;

a counter electrode, that is which has a different constitution from the electrode substrate and which is formed of a film made of a conductive material formed on a substrate, and which is placed facing the oxide semiconductor porous film; and

an electrolyte layer or charge transfer layer, that is which is adjacent to the oxide semiconductor porous film, and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed.